

Cyclic Crude and Intermediate Manufacturing: 2002

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2002 Economic Census

Manufacturing

Industry Series



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U.S. Department of Commerce
Economics and Statistics Administration
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Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
325192, Cyclic crude and intermediate manufacturing	2002..	34	39	6 294	418 820	3 788	8 315	233 369	1 228 130	3 158 017	4 511 736	186 178
	2001..	N	N	6 913	453 620	4 069	9 014	253 454	1 398 816	4 294 221	5 877 475	310 712
	2000..	N	N	7 477	486 663	4 480	10 198	264 105	3 268 121	4 948 840	8 062 649	751 235
	1999..	N	N	8 280	504 356	5 056	11 625	293 089	2 600 471	3 791 915	6 364 287	399 111
	1998..	N	N	8 557	463 580	5 024	11 408	264 080	2 513 536	3 457 395	6 051 134	382 578
	1997..	36	51	8 641	467 132	5 153	11 442	257 924	2 807 384	4 053 054	6 861 138	768 610

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
325192, Cyclic crude and intermediate manufacturing												
United States.....	—	39	28	6 294	418 820	3 788	8 315	233 369	1 228 130	3 158 017	4 511 736	186 178
Pennsylvania.....	—	3	3	767	42 100	542	1 182	28 763	367 329	142 279	519 784	8 342

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
325192, Cyclic crude and intermediate manufacturing	
Companies ¹	number.. 34
All establishments ²	number.. 39
Establishments with 1 to 19 employees	number.. 11
Establishments with 20 to 99 employees	number.. 15
Establishments with 100 employees or more	number.. 13
All employees ³	number.. 6 294
Total compensation	\$1,000.. 542 739
Annual payroll	\$1,000.. 418 820
Total fringe benefits	\$1,000.. 123 919
Production workers, average for year	number.. 3 788
Production workers on March 12	number.. 4 003
Production workers on May 12	number.. 3 974
Production workers on August 12	number.. 3 607
Production workers on November 12	number.. 3 563
Production worker hours	1,000.. 8 315
Production worker wages	\$1,000.. 233 369
Total cost of materials	\$1,000.. 3 158 017
Materials, parts, containers, packaging, etc., used	\$1,000.. 2 848 507
Resales	\$1,000.. 15 081
Purchased fuels	\$1,000.. 151 097
Purchased electricity	\$1,000.. 76 102
Contract work	\$1,000.. 67 230
Quantity of electricity purchased for heat and power	1,000 kWh.. 1 971 076
Quantity of electricity generated less sold for heat and power	1,000 kWh.. S
Total value of shipments	\$1,000.. 4 511 736
Primary products value of shipments	\$1,000.. 3 789 123
Secondary products value of shipments	\$1,000.. 701 827
Total miscellaneous receipts	\$1,000.. 20 786
Value of resales	\$1,000.. D
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 84
Value of primary products shipments made in all industries	\$1,000.. 7 188 232
Value of primary products shipments made in this industry	\$1,000.. 3 789 123
Value of primary products shipments made in other industries	\$1,000.. 3 399 109
Coverage ratio	percent.. 53
Value added	\$1,000.. 1 228 130
Total inventories, beginning of year	\$1,000.. 440 522
Finished goods inventories	\$1,000.. 299 790
Work-in-process inventories	\$1,000.. 15 579
Materials and supplies inventories	\$1,000.. 125 153
Total inventories, end of year	\$1,000.. 335 530
Finished goods inventories	\$1,000.. 177 679
Work-in-process inventories	\$1,000.. 12 101
Materials and supplies inventories	\$1,000.. 145 750
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. 3 440 848
Total capital expenditures (new and used)	\$1,000.. 186 178
Buildings and other structures (new and used)	\$1,000.. 18 119
Machinery and equipment (new and used)	\$1,000.. 168 059
Automobiles, trucks, etc., for highway use	\$1,000.. 4 524
Computers and peripheral data processing equipment	\$1,000.. 12 426
All other expenditures for machinery and equipment	\$1,000.. 151 109
Total retirements	\$1,000.. 163 575
Gross value of depreciable assets at end of year	\$1,000.. 3 463 451
Depreciation charges during year	\$1,000.. 204 250
Total rental payments	\$1,000.. 14 353
Buildings and other structures	\$1,000.. 5 799
Machinery and equipment	\$1,000.. 8 554
Total other expenses ⁴	\$1,000.. 260 652
Response coverage ratio ⁵	percent.. 95
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 63 942
Communications services ⁴	\$1,000.. 3 583
Legal services ⁴	\$1,000.. 25 451
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 2 463
Advertising and promotional services ⁴	\$1,000.. 324
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 3 596
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 8 612
Management consulting and administrative services ⁴	\$1,000.. 26 308
Taxes and license fees ⁴	\$1,000.. 11 091
All other expenses ⁴	\$1,000.. 115 282

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
325192, Cyclic crude and intermediate manufacturing											
All establishments	—	39	6 294	418 820	3 788	8 315	233 369	1 228 130	3 158 017	4 511 736	186 178
Establishments with—											
1 to 4 employees	7	7	a	D	D	D	D	D	D	D	D
5 to 9 employees	—	2	a	D	D	D	D	D	D	D	D
10 to 19 employees	9	2	b	D	D	D	D	D	D	D	D
20 to 49 employees	—	9	301	12 870	202	412	7 777	60 253	72 681	135 490	4 752
50 to 99 employees	—	6	435	22 642	284	569	12 523	85 069	132 551	222 898	6 692
100 to 249 employees	—	2	e	D	D	D	D	D	D	D	D
250 to 499 employees	—	7	2 447	148 594	1 444	3 252	81 068	121 782	1 372 915	1 565 947	125 460
500 to 999 employees	—	4	2 593	203 258	1 487	3 244	112 308	653 339	1 286 551	1 984 219	36 929
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	4	9	575	6	10	315	1 676	4 164	5 840	497

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1—10 to 19 percent; 2—20 to 29 percent; 3—30 to 39 percent; 4—40 to 49 percent; 5—50 to 59 percent; 6—60 to 69 percent; 7—70 to 79 percent; 8—80 to 89 percent; 9—90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
325192	Cyclic crude and intermediate manufacturing	39	6 294	418 820	3 788	8 315	233 369	1 228 130	3 158 017	4 511 736	186 178
3251921	Cyclic (coal tar) intermediates	23	6 009	406 595	3 579	7 917	225 183	1 163 307	3 068 544	4 357 333	179 561
3251924	Tar, tar crudes, and tar pitches	8	229	9 861	174	319	6 834	57 839	83 270	141 256	5 916

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. Products Statistics: 2002 and 1997

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
325192	Cyclic crude and intermediate manufacturing	2002.. N	X	X	7 188 232
		1997.. N	X	X	9 815 911
3251921	Cyclic (coal tar) intermediates	2002.. N	X	X	6 519 513
		1997.. N	X	X	8 905 865
32519211	Cyclic (coal tar) intermediates	2002.. N	X	X	6 519 513
		1997.. N	X	X	8 905 865
3251921100	Cyclic (coal tar) intermediates	2002.. 37	X	X	6 519 513
		1997.. 54	X	X	8 905 865
3251924	Tar, tar crudes, and tar pitches	2002.. N	X	X	650 472
		1997.. N	X	X	877 303
32519241	Tar, tar crudes, and tar pitches	2002.. N	X	X	650 472
		1997.. N	X	X	877 303
3251924100	Tar, tar crudes, and tar pitches	2002.. 10	X	X	650 472
		1997.. 12	X	X	877 303
325192W	Cyclic crude and intermediate manufacturing, nsk, total	2002.. N	X	X	18 247
		1997.. N	X	X	32 743
325192WY	Cyclic crude and intermediate manufacturing, nsk, total	2002.. N	X	X	18 247
		1997.. N	X	X	32 743
325192WYWW	Cyclic crude and intermediate manufacturing, nsk, for nonadministrative-record establishments	2002.. N	X	X	12 486
		1997.. N	X	X	18 533
325192WYWY	Cyclic crude and intermediate manufacturing, nsk, for administrative-record establishments	2002.. N	X	X	5 761
		1997.. N	X	X	14 210

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. **Product Class Shipments for Selected States: 2002 and 1997**

[Not applicable for this report.]

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
325192	Cyclic crude and intermediate manufacturing		
00900001	Total materials	2002.. X	2 848 507
		1997.. X	N
32518805	Sulfuric acid, excluding spent (100 percent H ₂ SO ₄)	1, 000 s tons.. 2002.. D	D
		1997.. 718.0	15 589
32531103	Nitrogenous fertilizers, ammonia, synthetic anhydrous (100 percent NH ₃)	1,000 s tons.. 2002.. D	D
		1997.. 130.1	24 301
32518103	Chlorine (100 percent Cl basis)	1,000 s tons.. 2002.. 733.5	105 637
		1997.. p365.5	80 372
32518107	Sodium hydroxide (caustic soda)(100 percent NaOH)	1,000 s tons.. 2002.. 163.9	25 865
		1997.. 122.5	27 360
32500071	All other industrial inorganic chemicals	2002.. X	D
		1997.. X	30 524
32512001	Acetylene and other industrial gases (argon, carbon dioxide, nitrogen, etc.), compressed and liquified	2002.. X	40 950
		1997.. X	19 100
32519213	Toluene and xylene (100 percent basis)	mil lb.. 2002.. D	D
		1997.. D	D
32411013	Benzol (benzene) (100 percent C ₆ H ₆)	mil lb.. 2002.. D	D
		1997.. 1 899.0	310 801
32519223	Tar, crude	1,000 s tons.. 2002.. p39.5	148 919
		1997.. S	129 681
32519233	Other cyclic crudes and intermediates	mil lb.. 2002.. D	D
		1997.. 56.7	205 588
325100A5	All other miscellaneous synthetic organic chemicals	2002.. X	41 120
		1997.. X	223 489
21111013	Natural gas used as a raw material	bil cu ft.. 2002.. S	6 274
		1997.. 8.3	19 109
32411033	Ethylene used as a raw material or feedstock	mil lb.. 2002.. D	D
		1997.. 747.2	174 649
32411035	Propane used as a raw material or feedstock	mil lb.. 2002.. D	D
		1997.. D	D
32411037	Propylene used as a raw material or feedstock	mil lb.. 2002.. D	D
		1997.. D	D
00190012	Other hydrocarbons used as raw materials or feedstocks	2002.. X	D
		1997.. X	D
33300015	Parts and attachments for machinery and equipment	2002.. X	7 497
		1997.. X	18 471
33240000	Metal containers	2002.. X	10 326
		1997.. X	6 069
00970099	All other materials and components, parts, containers, and supplies	2002.. X	874 700
		1997.. X	N
00971000	Materials, ingredients, containers, and supplies, nsk	2002.. X	97 426
		1997.. X	19 598

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.